

PROCEEDINGS
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NOTES ON *RHINOMURAENA*.

BY THOMAS BARBOUR.

While shore collecting at Ambon in the Moluccas during February, 1907, I caught an interesting eel, which is closely related to one described by Mr. S. Garman as *Rhinomuraena quaesita*.

In 1877 the Rev. B. G. Snow sent to the Museum of Comparative Zoölogy a collection of littoral fishes from Ebon in the Marshall Islands. This collection contained a peculiar eel on which Garman founded the Genus *Rhinomuraena*. No additional specimens of this genus have ever reached this museum. The eel which Jordan and Seale obtained in Samoa and described as *Rhinomuraena* (*sic*) *eritima* is, I believe, generically distinct both from *R. quaesita* Garman (Bull Essex Inst., 1888 [1889] pp. 114-116, fig.) and from the specimen taken at Ambon, which represents a new species. The three forms may be characterized as follows:

Rhinomuraena Garman l. c., p. 114.

Generic characters.—Nasal tubes present; rostral appendages situated at apices of both upper and lower jaws; uniserial teeth of about equal size; tail extremely elongate.

R. quaesita Garman.

This description is based on the type specimen which is still well preserved. Head 20.5 in total length, 6.7 in body anterior to vent; depth 3.6 in head; the length of the body is contained 2.2 times in the tail; length of snout from the posterial nostril 6.5 in head; eye 2.3 in snout; the angle of the jaws takes up one-third of the length of the head, jaws straight and may be completely closed; the dorsal fin begins a short distance behind the angle of the jaws; it is at first low, then increases in depth, until, at a distance midway between vent and tip of tail, its depth equals that of the body; the anal fin begins immediately posterior to the

vent; its depth is about one-half that of the dorsal fin. The posterior nostrils are on a line with the upper edge of the eye, and a little anterior to it; there is no elevation of the skin around the opening to form tubes. The anterior nostrils are produced into tubes slit distally and ending in foliaceous appendages. On the tip of the snout are four filamentous appendages, one at the apex of the upper jaw and three at the symphysis of the lower jaw. The gill opening is about twice the diameter of the eye. The teeth are all small pointing slightly backward, uniserial on both jaws and palate, the three anterior palatine teeth are slightly enlarged and lengthened; there are about 20 teeth in each of the three upper series and about 15 in each of the lower.

Color (after Garman).—"Body, head, tail, and inside of mouth cavity black; upper half of dorsal yellow; lower margin of anal white; lower lip white, except at and near the symphysis."

The specimen is about thirty-three inches long.

Type locality, Ebon Island (also called Boston Island and Covel Island). Ebon Islet, 5 miles long, forms the south and southeast side of an atoll. There are 21 wooded islets on this reef, of which this is the largest and most important. Situation, Marshall group, 4° 48' N., 168° 45' W. *Vide*, Brigham, W. T.—Index to the Islands of the Pacific. Mem. B. P. Bishop Mus. Honolulu H. T., Vol. 1, No. 2, 1900.

***R. ambonensis* sp. nov.**

Head 19 in total length, 5.75 in body anterior to vent; depth 4 in head; the length of the body is contained 2.25 in tail, length of snout from the posterior nostril 7.25 in head; eye a little more than 2 in snout; angle of jaws 3.4 in length of head, jaws straight and may be completely closed; the proportions of the fins are the same as in the preceding species. The posterior nostrils are one-third the diameter of the eye situated a little anterior to its upper margin. The anterior nostrils are typical of this genus, and the stalk and leaf in both of these species is a little longer than the distance from the tip of the snout to the posterior margin of the eye. (In Garman's figure these organs are represented about one-quarter too large.) The teeth of this form differ from those of *R. quaesita* in that on the upper side the anterior three teeth of each of the three rows are slightly enlarged, while on the lower jaw the teeth are minute and about 28 in number.

Color (from field notes of fresh specimen).—Body azure blue; on the tail this becomes lavender changing on the posterior part to buff with a pale edge; anal fin deep slate color with a yellow edge. The colors have changed slightly in alcohol, the yellow having faded to a cream color and the tones generally having become duller.

A single example 40½ inches long, taken in a shallow tide pool under a flat rock, Feb., 1907.

Ambon (Amboina), one of the Moluccas; Dutch East Indies.

In regard to the species which has been described by Jordan and Seale (The Fishes of Samoa. Bull. U. S. Bureau of Fisheries, Vol. XXV, 1905

[Dec., 1906] p. 196, fig. 6), as *R. eritima*, it may be added that this form is not congeneric with the two forms described above. Since it does not belong to a known genus, it may be hereafter known as—

Rhinechidna gen. nov.

Generic characters (fide Jordan and Seale, l. c., p. 196).—"Posterior nostrils consisting of slightly elevated tubes"; "anterior nostrils * * * long, about equal to eye, terminating in an expanded disc two-thirds as wide as eye"; "jaws curved and can not be completely closed"; "teeth in lower jaw in a single row of 25 sharp, concave teeth on each side, the anterior fin being enlarged; posterior teeth of upper jaw small and uniserial, the anterior teeth large biserial canines, three of which are on the median line of the vomer." The length of the body is the same as that of the tail.

Only one species is known.

Rhinechidna eritima (Jordan and Seale).

Type a single specimen 20.15 inches long, taken at Pago Pago, Tutuila Island, Samoa. No. 51,717 U. S. National Museum, Washington.